Release B CDR RID Report

Phone No

Date Last Modified 7/3/96

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JPL Aster Team

Organization E Mail Address

Document PDPS Database (Special Topic)

Section Page

Figure Table

RID ID

Review

Originator Ref

CDR

Priority 2

28

Release B CDR

Category Name

Processing (DPS) Design

Actionee ECS

Sub Category

Subject Security and PDPS database connections

Description of Problem or Suggestion:

PDPS multiplexes DBMS activities across a single DBMS connection. The presentation suggested that the existence of a connection is identified by "userid and password." However, the ECS Security Design hides the userid/password that an application server uses to connect to a DBMS. Is PDPS not using the Security Design, or does the DBMS connection need to be identified differently?

Originator's Recommendation

Verify that PDPS conforms to the ECS Security design, or obtain a waiver from TSIWG.

GSFC Response by:

GSFC Response Date

HAIS Response by:

G. Dobbins

HAIS Schedule

HAIS R. E.

C. Schwartz

HAIS Response Date

6/6/96

A database interface object is created for each persistent class upon PDPS startup. The creation of a new database interface object would normally result in the establishment of a new database connection, so the PDPS database interface code attempts to reuse open connections based on the recognition of a common userid, password, server name, database name, and runtime library.

The userid and password are obtained from CSS via the method CsSeConnectAuth in class CsSeCmi, but this call is only performed once per application process, so every database interface object created for that process will have the same userid and password associated with it. The userid and password are stored only in memory, not as persistent data. Moreover, since no additional database connections need to be established once the database interface objects are in place, the userid and password are not subsequently referenced by the code. That is, the PDPS code does not depend on the persistent retrieval of this information but only on the persistence of a database connection once established.

Since the userid and password are being used only for their intended purpose, to establish a connection to the database, the PDPS database interface code is in conformance with the ECS Security Design.

Status Closed Date Closed 7/3/96 Sponsor Kempler

****** Attachment if any *******

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